

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for network ~~[location]~~ management in a cellular telecommunication system supporting macro diversity connections, wherein, ~~[characterized]~~ in ~~[that, regarding]~~ a macro diversity ~~[situation]~~ connection, each cell in an active set of base station cells maintains a radio connection with a mobile terminal, the mobile terminal divides one signal to transmit on each of the radio connections, and the cellular system receives and combines the received signals to produce the original signal, [it] compris[es]ing the steps of:

[-] assigning priority levels to the cells of the ~~[an]~~ active set of the ~~[a]~~ macro diversity connection, wherein said step of assigning comprises the step of:

classifying each cell in the active set as either being in a serving cell set or not;

and

[-] selecting, at least partly based on the priority levels, [determining] a master cell from the serving cell set, wherein said master cell is to be used for at least one of connection management and [as the] location procedures between the cellular system and the [of a] mobile station.

2-3. (Cancelled)

4. (Currently Amended) The [A] method [according to] of claim 1 [3], [characterised in that] wherein said step of selection is performed by [the] a network of the cellular telecommunications system.

5. (Currently Amended) The [A] method [according to] of claim 4, [characterised in that] wherein the network performs the selection of the master cell as a response to a message received from the mobile station, which message does not contain an indication of a master cell.

6. (Currently Amended) The [A] method [according to] of claim 1 [3], [characterised in that] wherein said selection is performed according to a predefined rule.

7. (Currently Amended) The [A] method [according to] of claim 6, [characterised in that] wherein the predefined rule is that the cell of the serving cell set which has been in the active set for the longest time is selected to be the master cell.

8. (Currently Amended) The [A] method [according to] of claim 1 [3], [characterised in that] wherein said step of selection is performed by the mobile station.

66 9. (Currently Amended) The [A] method [according to] of claim 8, [characterised in that] wherein the cell selected by the mobile station is indicated to [the] a network of the cellular telecommunications system in a message sent by the mobile station.

10. (Currently Amended) The [A] method [according to] of claim 8, [characterised in that] further comprising the steps of:

- [-] requesting, by the mobile station, [requests] location information from the network[5]; and
- [-] receiving, by the mobile station, [receives] a response to the request from the network[5];
- [and]
- [-] wherein the selection of the master cell is performed at least partly based on said response.

11. (Currently Amended) The [A] method [according to] of claim 8, [characterised in that] wherein said step of selection is performed at least partly on the basis of information about localized [localised] services of the network stored in the mobile station.

12. (Currently Amended) The [A] method [according to] of claim 1, [characterised in that] further comprising the step of:

- changing the priority levels of the cells in the active set [are changed] as a response to serving RNC relocation.

13. (Currently Amended) The [A] method [according to] of claim 1, [characterised in that] wherein, as a response to serving RNC relocation, said method further comprises the steps of:

designating the cells of the active set which had been [were designated as being] in the serving cell set [are designated] as being outside the serving cell set[3]; and

designating the cells of the active set which had been [were] designated as [being] outside the serving cell set [are designated] as being in the serving cell set.

14. (Currently Amended) The [A] method [according to] of claim 1 [2], [characterised in that] wherein the step of classifying each cell in the active set as either being in a serving cell set or not comprises the steps of:

designating [mobile station designates] those cells of the active set as being in the serving cell set[3] which [cells] are listed in a message received from [the] a network of the cellular telecommunications system informing the mobile station about a serving RNC relocation[3]; and

designating [designates] other cells of the active set as being outside the serving cell set.

15. (Currently Amended) The [A] method [according to] of claim 1, wherein the [2-used in a] cellular telecommunication system compris[ing]es a cellular network, a first network element for controlling circuit switched connections, and a second network element for controlling packet switched connections, [characterised in that] said method further comprising the step of:

performing, when the [a] mobile station has an active connection to [a first of] the first [and second] network element[s] and no active connections to [a second of] the [first and second] network element[s], a location update to said second [of the first and second] network element[s is performed] at least partly as a response to a change in said serving cell set.

16. (Currently Amended) The [A] method ~~[according to]~~ of claim 15, ~~[characterised in that]~~ wherein said location update is performed at least partly as a response to the changing of all cells in the serving cell set.

17. (Currently Amended) The [A] method ~~[according to]~~ of claim 15, ~~[characterised in that]~~ wherein said location update~~[s are]~~ is performed at least partly as a response to removing of the last of those cells from ~~[in]~~ the serving cell set~~[s]~~ which ~~[cells]~~ were in the serving cell set when a previous location update was performed ~~[the previous time]~~.

Ab 18. (Currently Amended) The [A] method ~~[according to]~~ of claim 15, ~~[characterised in that the method]~~ further compris[es]ing the steps~~[, in which]~~ of:

[-] requesting, by the mobile station, [requests] location information from the network~~[s]~~;

[-] receiving, by the mobile station, [receives] a response to the request from the network~~[s]~~;

and

[-] determining, by the mobile station, [makes a decision about] whether or not to perform a location update to said second ~~[of the first and second]~~ network element~~[s]~~ at least partly based on said response.

19. (Currently Amended) The [A] method ~~[according to]~~ of claim 1, ~~[2-used in a]~~ wherein the cellular telecommunication system compris~~[ing]~~es a first network element for controlling circuit switched connections and a second network element for controlling packet switched connections, ~~[characterised in that]~~ said method further comprising the step of:

performing, when the [a] mobile station has an active connection to [a first of] the first [and second] network element[s] and no active connections to [a second of] the [first and second] network element[s], a location update to said first [of the first and second] network element[s-is performed] at least partly as a response to a change in said serving cell set.

20. (Currently Amended) A mobile station for a cellular telecommunication system comprising a cellular network, ~~[which mobile station has]~~ comprising:

means for communicating using a macro diversity connection[s] in which the mobile station communicates with the cellular network via a plurality of ~~[cells]~~ radio connections, each cell in an active set of base station cells maintaining at least one of said radio connections, said mobile terminal dividing one signal to transmit on each of said radio connections, and said cellular system receiving and combining the received signals to produce the original signal, said means for communicating comprising:

receiving means~~[characterized in that the receiving means are]~~ arranged to receive information for classification ~~[construction of a priority order for the plurality]~~ of each cell[s] in the active set as either being in a serving cell set or not ~~[with which the mobile station communicates in a macro diversity connection,]; and [the mobile station comprises]~~

selecting means ~~[that are]~~ arranged to select a master cell from the serving cell set, wherein said master cell is to be used for at least one of connection management and [as the location procedures between the cellular system and [of] the mobile station [at least partly on the basis of said priority order].

21. (Currently Amended) The [A] mobile station ~~[according to]~~ of claim 20, ~~[characterised in that the mobile station]~~ further compris[es]ing:

means for indicating the selected master cell to the network.

22. (Currently Amended) A system in a cellular telecommunication system, wherein, in a macro diversity connection, each cell in an active set of base station cells maintains a radio connection with a mobile terminal, the mobile terminal divides one signal to transmit on each of the radio connections, and the cellular system receives and combines the received signals to produce the original signal, ~~[characterised in that]~~ comprising:

a transmitter ~~[the system is]~~ arranged to transmit to a mobile station information for ~~[construction of]~~ assigning a priority order to [for] the plurality of cells in the active set,

wherein assigning comprises classifying each cell in the active set as either being in a serving cell set or not ~~[with which said mobile station communicates in a macro diversity connection];~~ and  
a receiver ~~[the system is]~~ arranged to receive from ~~[a mobile station, after having transmitted to]~~ said mobile station ~~[information for construction of a priority order for the plurality of cells with which said mobile station communicates in a macro diversity connection,]~~ information specifying a master cell selected from the serving cell set, wherein said master cell is ~~[and]~~ to ~~[indicate the specified cell as the]~~ be used for at least one of connection management and location procedures between ~~[of]~~ the mobile station and ~~[to]~~ a core network of the cellular telecommunication system.

23. (Currently Amended) The ~~[A]~~ system ~~[according to]~~ of claim 22, ~~[characterised in that]~~ wherein the system is located in a radio access network of the cellular telecommunication system.

24. (Currently Amended) The ~~[A]~~ system ~~[according to]~~ of claim 23, ~~[characterised in that]~~ wherein the system is located in the radio network controller of said radio access network.

25. (New) The method of claim 1, wherein the serving cell set comprises those cells under the control of the serving radio network controller (SRNC), which receives the signals from the mobile station and combines them to produce the original signal from the mobile station.

26. (New) The method of claim 1, wherein the connection management procedures for which the master cell is to be used comprises a connection management (CM) service request procedure.

27. (New) The method of claim 26, wherein the CM service request procedure comprises a mobile originated (MO) CM service request procedure.

28. (New) The method of claim 1, wherein the location procedures for which the master cell is to be used comprises a location updating procedure.

29. (New) The method of claim 1, wherein the at least one of connection management and location procedures for which the master cell is to be used comprises a paging responses through a radio resource control (RRC) connection.

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